



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,294	06/07/2000	Lewis Dean Dodrill	95-414	9135

23164 7590 03/25/2004

LEON R TURKEVICH
2000 M STREET NW
7TH FLOOR
WASHINGTON, DC 200363307

EXAMINER

NAJJAR, SALEH

ART UNIT	PAPER NUMBER
----------	--------------

2157

73

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/588,294

Applicant(s)

DODRILL ET AL.

Examiner

Saleh Najjar

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. This action is responsive to the amendment filed on February 20, 2004. Claims 1, 16, 23, and 38 were amended. Claims 1-30 are pending. Claims 1-44 are pending. Claims 1-44 represent an application server configured to execute a voice application using extensible markup language.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladd et al. US Patent No. 6,269,336.

Ladd teaches the invention substantially as claimed including a markup language to provide interactive services for a voice browser (see abstract).

As per claims 1 and 23, Ladd discloses a method and computer readable medium in an application server configured for executing a voice application, the method comprising: parsing an extensible markup language document having XML, tags for defining voice application operations (parsing tags; column 11, lines 36-63; column 12, lines 15-27; column 16, lines 29-40; Figures 4 and 6);

collecting attributes describing execution of the XML tags by the application server within an application runtime environment (getting information from within the tags; column 14, lines 1-17; column 16, lines 11-19; column 17, lines 35-44); and

generating for storage on a disk storage an output file for use as documentation that describes the voice application by outputting at least a portion of the collected attributes based on a user selection of an output format for the output file (storing and outputting attributes based on user choice; col. 12; col. 13, lines 41-65; col. 16, lines 11-19; column 17, lines 16-34; col. 20-24).

Ladd does not explicitly teach the limitation wherein the output file describing the voice application is generated on a tangible storage medium for user documentation. Ladd does teach that the parser unit 302 of the voice browser generates a tree or a hierarchical structure describing the user voice application and that structure is stored at the user terminal by state machine 306 (see col. 12, lines 15-25; col. 13, lines 40-65).

The claimed limitation of outputting a file stored memory for documentation purposes is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ladd by specifying the outputting of the tree structure describing the voice application as an output file on a tangible medium. One would be motivated to do so since a computer terminal typically can access and print files stored on memory.

As per claims 2 and 24, Ladd discloses the method and medium of claims 1 and 23, wherein the collecting step includes: identifying resources specified by the XML tags or selective execution based on respective specified conditions (identifying resources based on the tags; column 14, lines 1-17; column 16, lines 5-40); and storing the identified resources in a resource collection table (storing the information on a database; column 10, lines 45-57; column 14, lines 1-17; column 16, lines 11-19).

As per claims 3 and 25, Ladd discloses the method and medium of claims 2 and 24, wherein the identified resources include sound files configured for storing voice prompts, the step of storing the identified resources including storing the name of the sound files (storing the names of the sound files; column 19, lines 21-67; column 20, lines 1-27).

As per claims 4 and 26, Ladd discloses the method and medium of claims 3 and 25, wherein the sound files are stored in .wav format, each sound file having a corresponding text field for storing a corresponding text prompt, the step of storing the identified resources further including storing the text prompt concurrently with the respective sound files (storing .wave files and text files together; column 20, lines 5-27).

As per claims 5 and 27, Ladd discloses the method and medium of claims 2 and 24, wherein the collecting step further includes: identifying executable procedures

specified by the tags for selective execution based on the respective specified conditions (identifying procedures based on the tags; column 17, lines 35-67; column 18, lines 1-45); and storing the identified executable procedures in an executable procedures collection table (storing the procedures on a database; column 10, lines 45-57; column 14, lines 1-17; column 16, lines 11-19).

As per claims 6 and 28, Ladd discloses the method and medium of claims 5 and 27, wherein the step of identifying executable procedures includes identifying a procedure call to an external resource (getting information from an external resource; column 9, lines 11-26; column 10, lines 34-44, lines 59-67; column 11, lines 1-11; column 15, lines 60-67, column 16, lines 1-10).

As per claims 7 and 29, Ladd discloses the method and medium of claims 5 and 27, wherein the collecting step further includes: identifying possible next states of the voice application specified by the XML tags based on the respective specified conditions (identifying next states based on the tags; columns 14 and 15; Figures 5A-5C); and

storing the possible next states in a next states collection table (storing the next states in a database; column 10, lines 45-57; column 13, lines 51-65).

As per claims 8 and 30, Ladd discloses the method and medium of claims 7 and 29, wherein the generating step includes selecting for the output file the attributes from at least one of the resource collection table, the executable procedures collection table, and the next states collection table, based on the user selection (selecting attributes for the output files; column 13, lines 51-65; column 23, line 7-57; column 24, lines 13-25).

As per claims 9 and 31, Ladd discloses the method and medium of claims 8 and 30, wherein the generating step further includes selecting for the output file the attributes based on the user selection specifying one of a user prompt menu, a resource utilization table, and a call flow diagram (selecting attributes for the output files based on the user selection of a prompt menu;; column 7, lines 33-55; column 23, lines 8-21; Figure 2).

As per claims 10 and 32, Ladd discloses the method and medium of claims 7 and 29, wherein the step of storing the possible next states includes storing within an entry

of the next states collection table, corresponding to the XML document, the possible next states (storing the possible next states; column 13, lines 51-65; columns 14-14; column 16, lines 5-20; Figures 5A-7).

As per claims 11 and 33, Ladd discloses the method and means of claims 5 and 27, wherein the step of storing the identified executable procedures includes storing within an entry of the executable procedures collection table, corresponding to the XML document, the identified executable procedures (storing the executable procedures; column 13, lines 51-65; column 14; column 16, lines 5-20).

As per claims 12 and 34, Ladd discloses the method and medium of claims 2 and 23, wherein the step of storing the identified resources includes storing within an entry of the resource collection table, corresponding to the XML document, the identified resources (storing the identified resources; column 15, lines 60-67; column 16, lines 1-20).

As per claims 13 and 35, Ladd discloses the method and medium of claims 1 and 23, wherein the parsing step includes obtaining context information relative to the application runtime environment for each XML tag in the XML document (obtaining application information based on the tags, column 12, lines 15-27; column 17, lines 17-49; column 16, lines 29-61).

As per claims 14 and 36, Ladd discloses the method and medium of claims 13 and 35, wherein the obtaining step includes:

interpreting for each XML tag a corresponding operation (getting an operation for each tag; column 17, lines 17-49);

locating referenced XML documents that are specified within the XML tags (locating documents specified in the tags; column 17, lines 34-49);

identifying referenced procedure calls that are specified within the XML tags (identifying procedure calls in the tags; column 17, lines 61-67; column 18); and

locating resources specified within the XML tags (locating the resources specified in the tags; column 18).

As per claims 15 and 37, Ladd discloses the method and medium of claims 13 and 35, wherein the obtaining step includes interpreting each XML tag based on at least

one of execution of a prescribed routine corresponding to said each XML tag and referencing of a tag list that specifies a corresponding operation for said each XML tag (interpreting each tag and referencing operations for each tag; column 16, lines 29-57).

As per claims 16 and 38, Ladd discloses an application server and means comprising:

a storage medium configured for storing extensible markup language (XML) documents having XML tags that define voice application operations for a voice application (storing XML documents and tags that define voice application operations; column 13, lines 41-65; column 16, lines 1-19; column 17, lines 16-34); and

an application runtime environment configured for generating an output file for storage on a tangible medium and for use as user documentation that describes selected attributes of the voice application, the application runtime environment having a parser configured for determining attributes of the respective XML tags within each of the XML documents according to the application runtime environment, and a context collection module configured for storing the determined attributes, the application runtime environment selecting the stored determined attributes based on a user selection of an output format for the output file (using a parser to parse the XML tags and determine the attributes of the tags base on a user selection; column 11, lines 36-63; column 12, lines 15-27; column 14, lines 1-17; column 16, lines 11-61; column 17, lines 17-44; Figures 4 and 6).

As per claims 17 and 39, Ladd discloses the application server of claim 16 and 38, wherein the application runtime environment and means include a tag implementation module configured for executing the respective voice application operations specified by the XML tags, the tag implementation module having an executable library configured for storing executable routines for a first group of the XML tags, and a tag list that describes the voice application operations for a second group of the XML tags, the parser configured for determining the attributes based on the executable library and the tag list (determining the attributes of the parsed tags and implementing them; column 10, lines 45-57; column 17, lines 35-57; column 18, lines 1-45).

As per claims 18 and 40, Ladd discloses the application server of claims 17 and 39, wherein the application runtime environment and means include a resources directory configured for identifying respective locations of resources specified in the XML documents, the parser configured for determining the attributes based on the resources directory (parsing the XML tags and locating the resources specified in the tags; column 13, lines 7-57; column 14, lines 1-17; column 15, lines 60-67; column 16, lines 1-20; column 16, lines 5-40; column 23, lines 7-57; column 24, lines 13-25).

As per claims 19 and 41, Ladd discloses the application server of claims 18 and 40, wherein the resources are stored as voice prompts, each voice prompt having audio data and text data specifying contents of the corresponding voice prompt (having a voice prompt with audio and text data; column 20, lines 5-27).

As per claims 20 and 42, Ladd discloses the application server of claims 18 and 40, wherein the application runtime environment includes a procedures library configured for specifying executable procedures configured for generating respective procedure calls to prescribed external resources, the parser configured for determining the attributes based on the procedures library (having a library for specifying procedures and generating calls to external resources; column 9, lines 11-26; column 10, lines 34-44, lines 59-67; column 11, lines 1-11; column 15, lines 60-67; column 16, lines 1-10).

As per claims 21 and 43, Ladd discloses the application server of claims 20 and 42, wherein the context collection module includes: a resource collection table configured for storing the resources determined by the XML parser to be specified by a corresponding parsed XML document (a database for storing the resources; column 14, lines 1-17; column 16, lines 5-40);

an executable procedures collection table configured for storing the executable procedures determined by the XML parser to be specified by the corresponding parsed XML document (a database for storing the executable procedures determined by the parser; column 10, lines 45-57; column 17, lines 35-67; column 18, lines 1-45); and

a next states collection table configured for storing possible next states of the voice application determined by the XML parser to be specified by the corresponding

parsed XML document, the application runtime environment selecting the stored determined attributes from the resource collection table, the executable procedures collection table, and the next states collection table based on the user selection (a database storing the next states determined by the parser from the XML tags; column 10, lines 45-57; column 13, lines 51-65; columns 14-15; column 23, lines 7-57; column 24, lines 13-25; Figures 5A-5C).

As per claims 22 and 44, Ladd discloses the application server of claims 21 and 43, wherein the application runtime environment further includes an output module configured for generating the output file as any one of a user prompt menu, a resource utilization table, and a call flow diagram, based on the user selection (generating the output file as a user prompt menu; column 7, lines 33-55; column 13, lines 51-65; column 2, lines 7-57; column 24, lines 13-25; Figure 2).

4. Applicant's arguments with respect to claims 1-44 have been considered but are moot in view of the new ground(s) of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saleh Najjar whose telephone number is (703) 308-7613. The examiner can normally be reached on Monday-Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Ario Etienne*, can be reached on (703) 308-7562.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600. The central official fax number for the group is (703) 872-9306.



Saleh Najjar

Primary Examiner / Art Unit 2157